

### **WHAT IS CLAIMED IS:**

1. A bat structure, comprising a central portion, two symmetrical opposite side enclosure portions, and two symmetrical opposite outer enclosure portions, wherein:

5           the central portion has a substantially square cross-section and has four sides;

          the central portion includes a plurality of plates;

          the two opposite side enclosure portions and the two opposite outer enclosure portions are wound around the four sides of the central portion in a  
10   staggered manner;

          each of the two side enclosure portions includes a plurality of plates;

          the bonding faces between the plates of each of the two side enclosure portions are vertical to the bonding faces between the plates of the central portion;

15           each of the two side enclosure portions has a hardness greater than that of the central portion;

          each of the two outer enclosure portions includes a plurality of plates;

          the plates of each of the two outer enclosure portions are laminated,  
20   pressed and bonded together to form each of the two outer enclosure portions;

          each of the two outer enclosure portions has a hardness greater than that of the central portion.

2. The bat structure in accordance with claim 1, wherein the central portion is made of wood or bamboo.

3. The bat structure in accordance with claim 1, wherein each of the two side enclosure portions are made of wood or bamboo.

5 4. The bat structure in accordance with claim 1, wherein each of the two outer enclosure portions are made of wood or bamboo.

5. The bat structure in accordance with claim 1, wherein the plates of the central portion are laminated, pressed and bonded together to form the central portion.

10 6. The bat structure in accordance with claim 1, wherein the plates of each of the two side enclosure portions are laminated, pressed and bonded together to form each of the two side enclosure portions.

7. The bat structure in accordance with claim 1, wherein the bonding faces between the plates of each of the two outer enclosure portions are in parallel with the bonding faces between the plates of the central portion and are vertical to the bonding faces between the plates of each of the two side enclosure portions.

8. The bat structure in accordance with claim 1, wherein the central portion includes a plurality of bamboo plates and a plurality of wood plates, each of the two side enclosure portions includes a plurality of bamboo plates and a plurality of wood plates, and each of the two outer enclosure portions includes a plurality of bamboo plates and a plurality of wood plates.

9. The bat structure in accordance with claim 8, wherein the bamboo plates and the wood plates are laminated, pressed and bonded together in a staggered manner to form the central portion.

10. The bat structure in accordance with claim 8, wherein the  
5 bamboo plates and the wood plates are laminated, pressed and bonded together in a staggered manner to form each of the two side enclosure portions.

11. The bat structure in accordance with claim 8, wherein the bamboo plates and the wood plates are laminated, pressed and bonded together in a staggered manner to form each of the two outer enclosure portions.

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